

FLOOD MANAGEMENT Meeting Summary PLANNING PROGRAM Lower Sacramento Regional **Flood SAFE** Conditions Work Group Meeting #4

October 7, 2009, 9:00 am - 2:10 pm Location: Yolo County Farm Bureau 69 W. Kentucky Avenue Woodland, California 95695

WORK GROUP ATTENDANCE:

Name	Organization	Status
Ryan Bonea	Sutter County Resource Conservation District; Yuba County	Member
Bill Busath	City of Sacramento	Member
Andrea Clark	Three Rivers Levee Improvement Authority	Member
William Edgar	Sutter Butte Flood Control Agency	Member
Dan Fua	Central Valley Flood Protection Board	Member
Mike Hardesty	RD 2068, RD 2098, California Central Valley Flood Control Association	Member
Gena Lasko	California Department of Fish and Game	Member
Tom Smythe	Lake County	Member
Ronald Stork	Friends of the River	Member
Helen Swagerty	River Partners	Member
Jeffrey Twitchell	District One of Sutter County; urban and rural interests of Yuba City-Sutter Basin	Member
Gary Hester	CA Department of Water Resources	CVFMP* Program Manager
Michele Ng	CA Department of Water Resources	CVFPO**
Loren Murray	CA Department of Water Resources	DWR*** Regional Coordinator
Pierre Stephens	CA Department of Water Resources	DWR Lead
Vanessa Nishikawa	MWH Americas Inc.	Technical Lead
Craig Wallace	MWH Americas Inc	Team
Mike Harty	Kearns & West	Facilitator
Janet Thomson	Kearns & West	Facilitation Support / Note Taker

^{*}Central Valley Flood Management Planning

^{**}Central Valley Flood Planning Office

^{***}California Department of Water Resources

Absent:

Francis Borcalli	FloodSAFE Yolo; Water Resources Association of Yolo County	Member
Bill Center	American River Recreation Association, Planning & Conservation League, CABY (Cosumnes, American, Bear, Yuba) IRWMP	Member
Miki Fujitsubo	U.S. Army Corps of Engineers (USACE)	Member
Tovey Giezentanner	Conaway Preservation Group LLC; RD 2035; Water Resources Association of Yolo County	Member
Julia McIver	Yolo County	Member
Tim Miramontes	Yolo County Farm Bureau; California Rice Commission; California Farm Bureau Rice Advisory	Member
John Powderly	City of West Sacramento	Member
Tim Washburn	Sacramento Area Flood Control Agency	Member
David Zezulak	California Department of Fish and Game	Alternate

Observers:

None

WORK GROUP HOMEWORK/ACTION ITEMS

- 1. Review and provide comments on PARTIAL DRAFT text for Section 2.3, Existing Resources Conditions, which includes Cultural Resources and Emergency Planning, Response and Recovery, and DRAFT text for Section 2.4, Likely Future Conditions.
 - Document emailed to work group members on 10/5/09
 - Comments should be made in "track changes" and should focus on errors, omissions, redundancy, mischaracterization, and other major issues with the draft. These should be emailed to Todd Hillaire by 10/15/09 (email: hillaire@water.ca.gov)
- 2. Provide additional comments on the "Synthesized Problems and Opportunities Statements" and "Goals, Objectives, and Principles" documents.
 - Handouts provided at Meeting #4 and links emailed to work group partners on 10/13/09
 - Additional input should be inserted into the documents and emailed to DWR lead Pierre Stephens by 10/16/09 (email: jrstephe@water.ca.gov)

ACTION ITEMS: PROGRAM TEAM

- 1. The program team will consider the following items and report back on them at the next Lower Sacramento Regional Conditions Work Group meeting:
 - How coordination is to be conducted between BDCP and FloodSAFE
 - Flood protection at the Oroville Facilities is not adequately addressed; how interaction with water supply interests near Oroville can be fostered.
 - How conflicts between recommendations formed in the Environmental Stewardship Scope Definition WG and the Joint Subcommittee for Agricultural Stewardship Scope Definition can be resolved.

GROUP RECAP

The following may be edited and used by Work Group partners in communicating with their constituencies:

Members of the Lower Sacramento Regional Conditions Work Group received an update on the following items:

- Responses to issues raised in Meetings #2 and #3
- Action items from previous meetings
- Revisions to the Regional Conditions Work Group work plan
- Progress update from the Topic Work Groups

Members provided initial input into the development of the Regional Conditions Summary Report (RCSR) in the following areas:

- Synthesized Problem and Opportunities Statements Based on the work completed by the regional conditions work groups in meetings 2 and 3, the program team developed a synthesized list of problem and opportunity statements. The work group provided initial input to this document, focusing on omissions, clarity, and accuracy.
- CVFPP Goals, Principles, Legislative Requirements, & Objectives The program team
 presented a framework for developing goals, principles, and objectives for the CVFPP. The work
 group discussed the draft goals (based on the FloodSAFE goals) and principles and provided
 preliminary input for the program team.

FUTURE MEETINGS SCHEDULE

Meeting #5: Friday, October 30, 2009

City of Sacramento Department of Utilities

1395 35th Ave.

Sacramento, CA 95821

Meeting #6: Thursday, November 19, 2009

Location TBD

Meeting #7: Monday, December 7, 2009

City of West Sacramento 1110 West Capitol Avenue West Sacramento, CA, 95691

MEETING OVERVIEW

The purpose of Meeting #4 was to continue developing content for the Regional Conditions Summary Report.

MEETING GOALS

- 1. Clarify the 2012 CVFPP report structure and content
- 2. Address issues raised in Meeting #3
- 3. Provide roadmap of remaining meetings process, content, document
- 4. Provide status updates on Topic Work Groups
- 5. Continue refinement of Problem and Opportunity Statements (Chapter 3)
- 6. Introduce and begin work on Goals and Objectives (Chapter 4)

SUMMARY

Welcome and Greetings

Pierre Stephens, DWR, and meeting facilitator Mike Harty, Kearns & West, welcomed the meeting participants. Following introductions, Mike Harty reviewed the meeting purpose, goals, and agenda.

Opening Remarks

Gary Hester, DWR Executive Lead, thanked the partners for attending and reviewed answers to questions raised at meetings 2 and 3 (detailed in the handout "Responses to Questions from Meetings #2 and #3). This discussion resulted in the following questions from work group partners:

Q: Will someone from the CVFPP program attend BDCP Steering Committee meetings, or will someone from the BDCP Steering Committee meetings be attending Regional Conditions Work Group meetings? In order to have adequate coordination between the programs, someone from the CVFPP program should be attending BDCP Steering Committee meetings.

A: The commitment was to have someone from BDCP attend Regional Conditions Work Group meetings. In light of your comment, we will re-evaluate our proposed approach.

Q: Both BDCP and the CVFPP deal with storage and release of water out of the Oroville Facilities. The downstream cities and counties are hoping to have further discussions with those at DWR involved with water supply to ensure that there are adequate improvements for flood control there. How will that be addressed as part of this program?

A: I understand the concern, and I will look into it and provide a response from DWR at a future meeting.

Comment: One of the Work Group members expressed a concern that by having two separate topic work groups focusing on environmental stewardship and agricultural stewardship, we may wind up with opposing outcomes or recommendations from the groups on topics that are intertwined. There may be no way to resolve those issues since they are being dealt with in separate groups.

A: It was agreed to discuss that concern at the next planning meeting to consider how DWR can address it.

Review of Meeting #3 Action Items

1. Vanessa Nishikawa to distribute an email regarding the formation of the agricultural stewardship topic work group.

Status: Complete

2. Janet Thomson to seek partner availability for rescheduled meetings and confirm new dates for meetings #5 and #7.

Status: Complete

Vanessa Nishikawa to update the RCSR Glossary to include "floodplain management."
 Status: Complete

4. Pierre Stephens to distribute the draft section on flood management history for review and

Status: Document not yet available, although an expanded history section is available in the Draft Regional Conditions Summary Report Section 2.1.

5. Vanessa Nishikawa to report on briefings provided to local governments regarding the CVFPP. **Status:** Briefings are beginning this week. Updates on the briefings schedule are posted on the SharePoint calendar.

Overview of Roadmap and Topic Work Group Progress

Pierre Stephens, DWR, described the revisions to the work group roadmap. The schedule has been condensed from 10 meetings to 7 meetings. Some supporting materials originally planned for inclusion in the RCSR, such as the reader guide, the lessons learned from the work group process, and the findings, will be moved into a companion document and the management actions report.

MWH technical lead Vanessa Nishikawa presented an update on the activities of the topic work groups. The operations and maintenance, environmental stewardship, climate change, and levee performance

topic work groups began to meet in August and will have four meetings, completing their work in October. Their work products (key aspects to include in the 2012 plan, reference list development, prioritization of problems and opportunities, a check list for success factors, a list of relevant projects and programs, and goals and principles) will be made available to the regional conditions work groups in November. The agricultural stewardship group will meet twice in October and November and its work products will be available in late November. All interim deliverables will be available at: www.water.ca.gov/cvfmp/meetings/.

Vanessa noted that a revised draft of the RCSR will be developed after the final regional conditions work group meetings in December. The program team will conduct back-check reviews with the work group partners before the public review occurs in early February. The program team will also confer with work group partners on the plan for the Valley-Wide Forum (tentatively scheduled for early February) and to scope out the next work groups.

Review Synthesized Problems and Opportunities Statements

MWH technical lead Vanessa Nishikawa gave a presentation on the synthesized problems and opportunities statements that are intended to support the development of goals, objectives, and management actions in the RCSR. The synthesized problem statements were developed by combining the problem categories, problem statements, and regional differences developed by the regional conditions work groups. There are 20 statements organized into seven categories. The synthesized opportunities statements, which will be available in subsequent drafts of the document, were identified through work group discussions on problems and opportunities, community success factors, and the references list.

The work group partners reviewed the Draft Synthesized Problems and Opportunities Statements document and had a roundtable discussion regarding clarity, omissions, and accuracy. The content from the discussion is summarized in the table below.

Problems and Opportunities	Work Group Comments
Category 1 – Flood System Performance	Rename "flood control system" or "flood management system, " or otherwise ensure consistency with legislative terms
Channel does not convey design capacity due to changed channel conditions a. Vegetation growth in channel b. Accumulation of sediment, snags, or debris c. Changed stream gradient and levee profile due to subsidence d. Changed stream gradient due to channel meander e. Additional downstream restrictions	 Consider whether situations where the amount of water exceeds design capacity is a problem that should be captured here, in problem statement #3, or elsewhere Another aspect of the problem is that some degraded systems may provide more capacity, but wind up with increased vulnerability due to erosion.
2) Levee structural integrity is compromised due to: a. Erosion b. Seepage c. Overtopping (wind, wave run-up, high flows) d. Subsidence/settling e. Burrowing activity f. Large, woody vegetation g. Contact damage (ships and abandoned vessels) h. Human activities on the water-side of levee i. Encroachments j. Levee penetrations	 Coordinate with Levee Performance Scope Definition WG. Consider adding "channel scouring" to this list Consider combining (h), (i), and (j), or just (h) and (i), into a single topic of "encroachments." Consider adding that integrity is compromised due to the fact that original levee designs do not match current expectations for levee levels

	 of protection. For erosion, this bullet doesn't capture the situation where one agency is responsible for bank stabilization and another for levee maintenance. If bank stabilization doesn't occur, it puts the onus on the levee maintainer who may not have the resources to fix the whole problem. This section doesn't reflect the fact that it is difficult for agencies to conduct minor repairs until they become large problems (due to the permitting hurdles.) This section should reflect the disconnect between benefits of the system and the costs incurred by local maintenance entities.
3) Hydraulic features (weirs, gates, bifurcations,	Add "(d) Lack of current models."
overflows) are difficult to operate or do not perform to design standards due to:	
a. Accumulation of sediment	
b. Additional downstream restrictionsc. Antiquated control systems	
4) Prescribed reservoir releases under current water control manuals can result in flows that exceed downstream channel capacities due to: a. Insufficient storage capacity to regulate flood flows b. Current water control manuals were not designed to meet all current system-wide objectives: i. System-wide coordinated operations ii. Flood protection iii. Water supply iv. Ecosystem resources v. Recreation vi. Water quality vii. Hydropower c. Not using available forecasting technology in operations decisions	 This statement is not quite right because during flood events, the only priority is flood protection. Storage and other objectives are not priorities during flood protection efforts (though they may be during pre-flood operations). Subsections (a) and (b) need to reflect that. Some of the water control manuals are obsolete and do not provide a way to conduct system-wide forecast-based operations. In that way, they may constrain operations. This statement should reflect the need for dam safety operations in addition to managing flood flows. Subsection (a) should reflect "insufficient flood storage capacity" The problem statement should reflect how improvements to agricultural drainage alters flow operations.
5) Original design no longer provides intended level of protection due to: a. Changes in design standards b. Changes in hydrology/hydraulics	Change "intended level of protection" to "the currently expected level of protection"
 New subsurface information since completion of design and construction 	
6) For many communities in the Central Valley, the existing flood management system does not provide the level of protection desired and/or required because:	

a. The system was designed for different uses and levels of protection b. Adequate funding for improvements is not available c. New legislation increases the requirements for urban and urbanizing areas Category 2 – System Maintenance and Repair	 Rename "flood control system" or "flood management system, " or otherwise ensure consistency with legislative terms Note the link between this category and category 3.
7) It is difficult to adequately maintain levees and channels according to operation and maintenance manuals due to: a. Permitting and mitigation requirements i. Cost and timeliness of process ii. Varying construction and mitigation requirements iii. Restrictive construction work windows iv. Site-specific permitting requirements hinder regional maintenance b. Vegetation growth (hiding problems and restricting access) c. Lack of sustainable funding for proactive maintenance i. Insufficient revenue generation ii. Disproportionate cost of permitting d. Inconsistent federal, state, and local maintenance standards, practices, and implementation	 O&M manuals may not reflect conditions on the ground, especially regarding the degree to which vegetative growth should be addressed or left as is. This section needs to address O&M manuals on a local level (e.g., for irrigation channels and drains) in addition to state and federal level manuals. This problem statement should address not just O&M manuals but also current practices (that may not be in line with O&M manuals). Address disconnect between benefit of system and cost of repairs. For example, Yolo Bypass benefits many, but local districts pay for repairs. Add (e): Conflict with habitat quality, quantity, and connectivity. (See #10)
Category 3 – Habitat Quality, Quantity, and Connectivity	 Note the link between this category and category 2 (coordination is needed). Note that current project purposes (including habitat) are in conflict with the original goals of the flood protection system.
8) There has been a loss and degradation of native habitat and species due to: a. Loss and fragmentation of habitat b. Invasive species c. Lack of environmental regulation coordination d. Conflicts between maintenance practices and environmental values e. Mitigation challenges (coordination, funding, monitoring, and adaptation)	 Subsection (d) environmental values is a personal/subjective interpretation – consider renaming "ecological processes." The loss of fish passage is not adequately captured here. Consider combining problem statements 8 and 9: "Initial intent of the flood system has resulted in the loss and degradation" Need a problem statement that addresses the problems that agencies face in getting permits to provide for increased habitat connectivity.

	 Opportunity for restoration with multi- objective projects or programs.
9) Flood system development has negatively impacted natural hydrologic and geomorphic processes due to: a. Engineered/constrained channels and related facilities b. Flow regime (duration and timing)	 Should be "hydrologic, geomorphic, and biological processes" Should be "flood management" or "flood control" system.
Category 4 – Policy and Institutional	 This category needs to address the trend toward increased liability, responsibility, and authority for flood protection placed on local agencies from federal and state agencies. This category needs to address Prop 218 and Prop 13 constraints.
10) Flood management is often made difficult by the large number of agencies and entities involved, and their complex jurisdictional roles and responsibilities, including: a. Conflicting policies and missions b. Conflicting regulations and legislation c. Jurisdictional issues d. Lack of coordination	 This problem statement (and #7 and #8) needs to address the fact that some agencies are not willing to propose or conduct certain environmentally-beneficial activities because, due to regulations, conducting those activities will re-set the baseline conditions for future work. This should more explicitly address the dysfunction between agencies and the inability or unwillingness to solve problems in ways that meet multiple objectives. Safe harbor agreements or other mechanisms might help.
 11) The trend toward strict liability for damages due to levee or other flood control facility failure is a deterrent to the construction of flood management projects. 12) Current federal, State, and local funding mechanisms are not adequate to sustain effective flood management 	(a) add: due to Propositions 218 and 13
due to: a. Inability to assess and generate funding at a local level b. Declining federal cost share c. Benefit/cost requirements d. Limitations on State funding (grants and loans)	 (b) for some interest groups, this was deliberate solution, not a problem Add (e): Failure to assign costs of public benefits to public
13) Land use decisions at the local level may not adequately consider flood risk due to: a. Poor or outdated flood risk information and maps b. Strong desire for economic development	
14) The consequences of flooding are increased by certain land use practices, such as: a. Urbanization b. Agricultural practices that: i. Obstruct flow paths ii. Replace low value with high value crops Category 5 – Water Supply and Quality	 Obstructing flow paths happens due to urbanization as well. Add (c): Design and placement of utilities, facilities, and transportation infrastructure
15) Integrated flood management is made difficult by competing needs for flood storage, water supply, power generation, the environment, and recreation.	This statement should reflect that flood protection takes the highest priority, and these other needs are of

	 lower priority during times of high flood risk. Consider rephrasing: "competing needs could impede enhanced flood protection operation at reservoirs".
Floods can impair water quality due to: a. Groundwater contamination via unsealed well heads b. Mobilization of hazardous materials and contaminants in floodplain	16(a) should also include contamination of water treatment and wastewater treatment facilities
17) Flood system maintenance, such as dredging and clearing, can disturb sediment and negatively impact water quality.	This problem statement should address what the disturbance threshold is, i.e., how much disturbance is acceptable, when does it become an issue.
	 This problem statement should address contaminants as well as sediments.
Category 6 – Emergency Response and Post-Flood Recovery	 This category needs to include preparedness as well as response and recovery; or there should be a separate preparedness category. Note that the public winds up being the first responders, and the problem statements do not address this.
a. Institutional capacity, resources, and coordination b. Inadequate local and regional response planning (access, egress, warning, and communications) c. Lack of comprehensive mutual aid agreements d. Insufficient funding	Add that response and recovery are limited by vulnerabilities in utilities and transportation networks
19) Existing post flood recovery plans and programs do not adequately address: a. Debris removal b. Timely restoration of utilities c. Jurisdictional responsibilities d. Coordination e. Agricultural recovery f. Regional economic recovery	Dislocation, migration, HAZMAT, and biohazards should be added as subsections.
Category 7 – Information and Education	This category should also address public perception; maybe rename "public perception, information, and education"
20) Among the public there is a general lack of understanding of flood risk because: a. Access to information is limited	Lack of understanding exists in planning organizations as well as in the general public
b. Uncertainty regarding responsibility for education c. False sense of security	 The problem is not the failure to access to information, but the inability to access information. Should add a subsection "(d) oversimplification of information due to institutional categorization."

Introduce CVFPP Goals, Principles, Legislative Requirements, and Objectives

MWH technical lead Vanessa Nishikawa gave a presentation about the draft CVFPP goals and the purpose of the goals, principles, and objectives. The goals describe the broad and enduring values, direction, or desired conditions we want to achieve. The objectives specify what we want to accomplish. The principles define how we will go about "doing business." The legislative requirements include both legislated requirements and legal mandates that will influence the outcomes of the CVFPP. The goals, objectives, principles, and requirements feed into the management actions.

The group had a roundtable discussion of the draft CVFPP goals, focusing on clarifications, omissions, and corrections. The key points from the discussion are as follows:

Draft CVFPP Goal	Work Group Comments
Central Valley Flood Protection: Define and provide appropriate levels of flood protection for lands currently receiving protection from facilities of the State Plan of Flood Control, including urban and urbanizing areas, small communities, and rural and agricultural lands.	 The definitions of rural community, small community, rural lands, and agricultural lands should be added to the RCSR glossary. This goal should clarify that the CVFPP will define what appropriate levels of flood protection should be, in addition to what levels of flood protection currently exist. Instead of "levels of flood protection," the goal should refer to "appropriate flood protection standards." This goal seems too narrow. Rather than solely addressing lands receiving protection from SPFC facilities, it should address all flood protection activities in the CVFPP plan area. The goal should address floodplain management in addition to floodwater management. Add goal: "Define where we are at now".
Delta Flood Protection: In recognition of the role of the Sacramento-San Joaquin Delta in providing flood management, define and provide appropriate levels of flood protection for the Delta.	 The first clause of the sentence may not be needed in the goal. There is a concern that the clause referring to "providing appropriate levels of flood protection" may indicate that some areas are not worthy of receiving any level of protection. "Levels of flood protection" should perhaps be changed to "appropriate flood protection standards."
Natural Processes: Promote sustainable operations and maintenance and environmental rehabilitation by improving the flood management system in ways that are more compatible with natural processes and adaptive to future climate changes.	Improvements cannot always be more compatible with natural processes.
Sustainable Management: Develop sustainable funding and institutional management structures that enable effective and efficient floodplain management (operations, maintenance, response, and recovery).	 This goal should more explicitly be tied to land use and include other pre-flood activities. This is the only time that "floodplain management" appears in the goals, and it should be used more broadly than just in this fourth goal. Throughout the goals, attention should be paid to whether the term "floodplain management" or "flood management" is used. O&M is usually used in a broader context, not floodplains.

Implementation Framework: Establish a framework (guidance, standards, and procedures) for the implementation and funding of individual projects that contribute to a system-wide approach to integrated flood management.	This goal should include maintenance in addition to funding. There is a lack of clarity about the intent and the scope of this goal. Does it work cooperatively with other FloodSAFE activities? Is it intended to set priorities? Is it in fact an implementation plan, rather than an implementation framework? Is it a "system-wide approach" or a "valley-wide approach?"
---	---

The work group partners additionally reviewed and had a brief initial discussion of the draft CVFPP principles. The content of that discussion is summarized in the following table:

Draft CVFPP Principle	Work Group Comments
Approach flood risk management on a system-wide basis and avoid adverse impacts.	 This should say "valley-wide" rather than "system-wide." Clarify that not all projects have to have "system-wide" or "valley-wide" benefits to be justified (consistent with the "no regrets" policy).
Integrate land use planning with flood risk management.	
Encourage and fund projects that offer multiple or regional benefits.	 This bullet may be overly restrictive. Consider striking "and fund" here and create a separate principle that deals with funding. Refer to "projects and programs". Be specific about regional benefits.
Protect and restore natural floodplain processes and promote environmental stewardship.	
Design and build flood protection facilities to avoid catastrophic or unexpected failures.	 This goal is unattainable – it is impossible to build facilities that will avoid catastrophic or unexpected failures. Consider re-wording to say "design and build to a practical engineering standard" or use another appropriate caveat.
Promote and fund regional planning.	
Adapt flood management to cope with climate change.	
Provide accurate information about flood risks to help residents and communities make safe decisions.	
Leverage State investments to provide maximum public benefits.	 This bullet may run counter to the approach of "no regrets" projects. Consider striking it, or re-writing so that it does not constrain funding for projects that prioritize public safety. Consider clarifying that "public benefits" might include environmental restoration and ecosystem benefits.
Provide equitable access to decision process.	
Other	A principle should address public safety.